

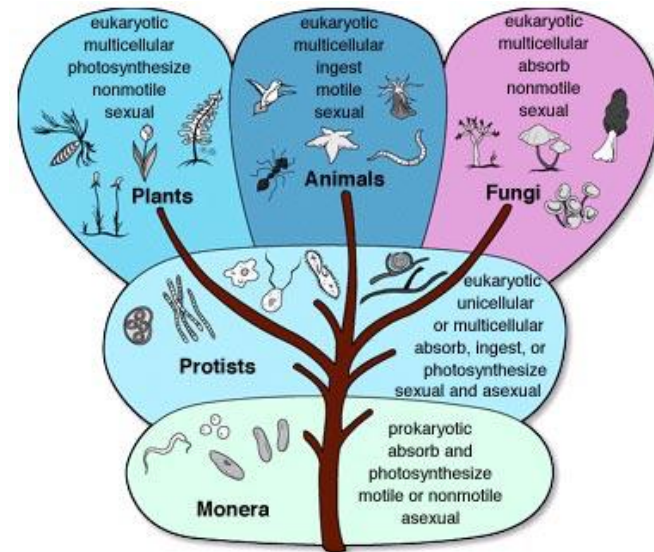


Natural Sciences 4

Module 1: Living Things


Kingdoms

To make the study easier we divide them into kingdoms. (Para estudiarlos con mayor facilidad dividimos los seres vivos en reinos).






The Animal, Plant and Fungi Kingdoms

REMEMBER!

- Living thing: 
 - they born (nacen)
 - they eat (comen)
 - they grow (crecen)
 - they reproduce (reproducen)
 - they die (mueren)
- Non-living thing

The Animal, Plant and Fungi Kingdoms

- The Plant kingdom:  They can't move around. (No se desplazan).
They make their own food. (Producen su propia comida).
- The Animal Kingdom:  They can move around. (Se desplazan).
They eat other living things. (Come otros seres vivos)
- The Fungi Kingdom:  They can't move around. (No se desplazan)
They don't make their own food. (No producen su propia comida)

The Animal, Plant and Fungi Kingdoms

- The Plant kingdom: { They can't move around. (No se desplazan)
They make their own food. (Producen su propia comida).

Grasses + bushes + trees



The Animal, Plant and Fungi Kingdoms

- The Animal Kingdom: { They can move around. (Se desplazan).
They eat other living things. (Se alimenta de otros seres vivos)

Vertebrates + Invertebrates



The Animal, Plant and Fungi Kingdoms

- The Fungi Kingdom:



They can't move around. (No se desplazan).
They don't make their own food. (No producen su propio comida)

Cells



All living things are made up of cells: (Todos los seres vivos estamos formados por células).

- Cells have different functions. (Tienen diferentes funciones).
- You can see them with a microscope. (Los podemos ver usando el microscopio).

The Animal Kingdom: invertebrates

97% of all animals are invertebrates. (El 97% de los animales existentes son invertebrados).

- Molluscs:

Have soft body. (Tienen el cuerpo blando)

Often have a hard shell. (A veces tienen una concha dura)



The Animal Kingdom: invertebrates

97% of all animals are invertebrates. (El 97% de los animales son invertebrados)

- Jellyfish:



Have soft body. (Tienen el cuerpo blando)

Often have long tentacles. (A veces tienen largos tentáculos)

The Animal Kingdom: invertebrates

97% of all animals are invertebrates.

- **Sponges:**

Have soft body covered with little holes. (tienen el cuerpo blando).

Stay on **seabed**. (viven en el fondo marino).



The Animal Kingdom: invertebrates

97% of all animals are invertebrates.

- **Echinoderms:** { Have hard skin or spikes. (Tienen la piel dura o púas).
Starfish is a echinoderm. (La estrella de mar es un equinodermo).



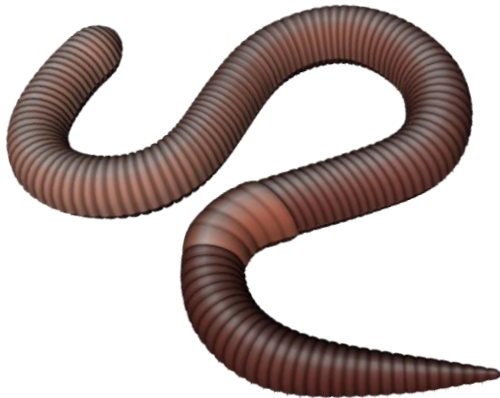
The Animal Kingdom: invertebrates

97% of all animals are invertebrates.

- **Annelids:**

Have soft body divided in segments. (Tienen el cuerpo blando y dividido en segmentos)

Earthworm is an annelid. (La lombriz de tierra es un anélido)



The Animal Kingdom: invertebrates

97% of all animals are invertebrates.

- **Arthropods:**



The biggest group is insects. (El grupo más grande de animales)

They live in water or on land. (Pueden vivir en el agua o en la tierra).

Have a protective exoskeleton. (Les protege un exoesqueleto)

The Animal Kingdom: vertebrates

All vertebrate animal have backbone and carry out three life processes: (Todos los vertebrados tienen columna vertebral y realizan estos tres procesos de vida).

Mammals:

- Respiration: They breathe using their lungs. (Respiran utilizando los pulmones).
- Reproduction: They give birth. They are viviparous. (Se reproducen dando a luz, tienen bebés, son vivíparos).
- Nutrition: They can be carnivores, herbivores and omnivores. (Pueden ser carnívoros, herbívoros y omnívoros).

The Animal Kingdom: vertebrates

All vertebrate animal have backbone and carry out three life processes:

Fish:

- Respiration: They breath using their gills. (Respiran utilizando sus agallas).
- Reproduction: They lay eggs. They are oviparous. (Se reproducen poniendo huevos, son ovíparos).
- Nutrition: They can be carnivores and ommnivores. (Pueden ser carnívoros u omnívoros).

The Animal Kingdom: vertebrates

All vertebrate animal have backbone and carry out three life processes:

Amphibians:

- **Respiration:**They breath using their gills when are bebies but when they are adults use their lungs. (Cuando son bebés respiran usando sus agallas, pero cuando crecen pasan a utilizar sus pulmones).
- **Reproduction:** They lay eggs. They are oviparous. (Se reproducen poniendo huevos, son ovíparos).
- **Nutrition:** They can be carnivores and ommnivores. (Pueden ser carnívoros u omnívoros).

The Animal Kingdom: vertebrates

All vertebrate animal have backbone and carry out three life processes:

Reptiles:

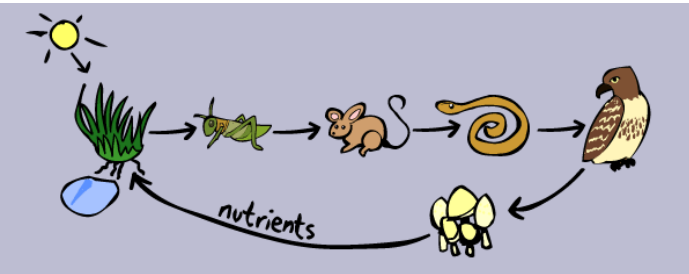
- **Respiration:**They breath using their lungs. (Respiran utilizando los pulmones).
- **Reproduction:** They lay eggs. They are oviparous. (Se reproducen poniendo huevos, son ovíparos).
- **Nutrition:** They can be carnivores. (Son carnívoros).

The Animal Kingdom: vertebrates

All vertebrate animal have backbone and carry out three life processes:

Birds:

- **Respiration:**They breath using their lungs. (Respiran utilizando los pulmones)
- **Reproduction:** They lay eggs. They are oviparous.(Se reproducen poniendo huevos, son ovíparos).
- **Nutrition:** They can be carnivores, herbivores and omnivores. (Pueden ser carnívoros, herbívoros y omnívoros).



Food chains

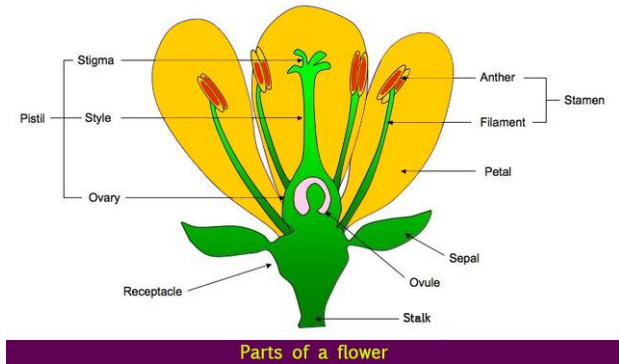
Food chains:

The animals that eat or are eaten by each other. Food chains includes animals, plants and other organism. (Los animales comen y son comidos por otros a su vez. Las cadenas alimenticias incluyen a los animales, plantas y otros organismos).

- Plants: They are producers, because they produce their own food. (Las plantas son productoras puesto que pueden producir su propia comida).
- Herbivores: Are primary consumers, because they eat plants. (Los herbívoros son consumidores primarios, pues se comen a los productores (plantas)).
- Omnivores and carnivores: Are secondary consumers, because they eat primary consumers. (Los omnívoros y los carnívoros son consumidores secundarios pues se alimentan de los consumidores primarios).
- Decomposers: They transform plant and animal matter into nutrients. (Los descomponedores se alimentan de los restos de plantas y animales muertos).

The Plant Kingdom:

How do plants reproduce?



Sexual reproduction:

In sexual reproduction pollen goes from stamen of one flower to the pistil of a different one. (En la reproducción sexual, el polen va del estámen de una planta al pistilo de otra diferente).

The pollen joins an ovule to make a seed. This is called fertilisation. (El polen se introduce en un óvulo, dando lugar a una semilla).

The Plant Kingdom:

How do plants reproduce? ¿Cómo se reproducen las plantas?

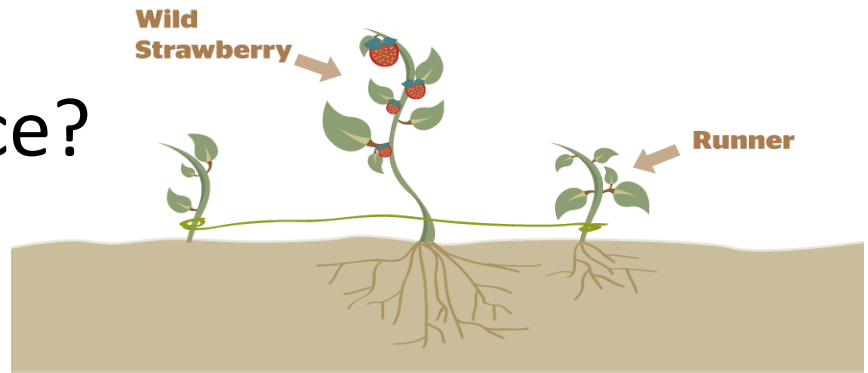
Sexual reproduction:

- Insect and animal pollination. (Polinización a través de insectos u otros animales)
- Wind pollination. (Polinización a través del viento).
- Self pollination. (Auto polinización).

The Plant Kingdom:

How do plants reproduce?

Asexual reproduction:

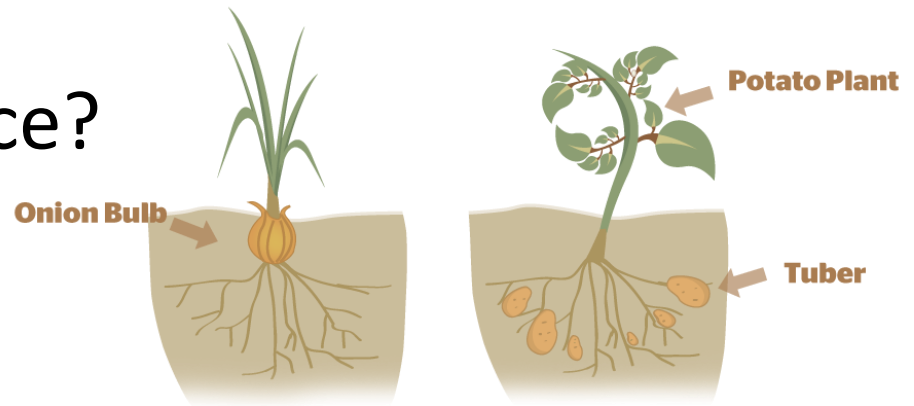


- Runners: stem grows along the ground. (El tallo crece a lo largo del suelo).

The Plant Kingdom:

How do plants reproduce?

Asexual reproduction:



- Tubers: stem grows under the ground. (El tallo crece bajo el suelo).

Plants and animals living together

- **Population (Población):** Are the living things of the same species which live in the same place. (Son el grupo de seres vivos que tienen las mismas características y viven en el mismo sitio).



Plants and animals living together

- **Community (Comunidad):** Are the different populations that live in the same place.
(Formada por las diferentes poblaciones que viven en un mismo sitio).



Plants and animals living together

- **Habitat:** Is the amount of light and water, the temperature and type of soil. (Formado por la cantidad de luz, agua, temperatura y tipo de suelo).



Plants and animals living together

- **Ecosystem (Ecosistema):** Is the combination of the habitat and its community. (Es la combinación de un habitat y de una comunidad).

